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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,747	10/14/2003	Ronald L. Mahany	14211US03	4061
23446 7590 04/16/2008 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				
EXAMINER				
TSE, YOUNG TOI				
ART UNIT		PAPER NUMBER		
2611				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/684,747

Applicant(s)

MAHANY, RONALD L.

Examiner

YOUNG T. TSE

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20.22-36 and 38-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20.22-36 and 38-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 11-18, 24, 32,, and 41 are objected to because of the following informalities:

In claim 11, line 5, both occurrences, "of modulation" should be "of spread spectrum modulation".

In line 1 of claims 16, 24, 32, and 41, "comprising" should be "further comprising".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 41 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 41 now recites that the device is a laptop computer appears lacks support in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 17, 24-25, 33, and 38-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17, 25, and 33 lack connection or cooperation with any of the precedent claims. In other words, it is vague and indefinite what is the relationship between the device and the laptop computer.

Claim 24 depends from claim 21 is indefinite since claim 21 has been cancelled.

Claims 38 and 40 depend from claim 37 are also indefinite since claim 37 has been cancelled.

In line 2 of both claims 24 and 40, the term "the controller" lacks antecedent basis.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11-20, 22-36, and 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. U.S. Patent No. 5,887,020 (hereinafter "Smith") in view of Morrow, Jr., U.S. Patent No. 5,022,046.

Regarding claims 11, 19, 27, and 35, Smith discloses a wireless radio transceiver in Figure 1 comprising a dual band transmitter 1 and a dual band receiver 7 in

communications with each other and with the hand held device 13. The detailed embodiments of the dual band transmitter 1 and the dual band receiver 7 are shown in the block diagrams of Figures 2 and 3, respectively. Clearly, each of the transmitter 1 and the receiver 7 comprises a mode controller 103 and a mode select switch 104 for selecting either a first type of modulation (spread spectrum) or a second type of modulation (narrowband). See col. 6, lines 11-49; col. 7, line 1-22; and col. 8, lines 23-39 and 50-62.

Regarding claims 14-15, 19-20, 30-31, and 35-36, the transceiver is processing radio communications according to more than one mode and more than one frequency band, for example, a first protocol used for communications in a first frequency range (narrowband frequency band) and a second protocol used for communications in a second frequency range (spread spectrum frequency band). Wherein one of the frequency ranges includes 2.4 GHz within the range 2.4-2.4835 GHz. See abstract.

Smith does not explicitly show, suggest or teach that both the first type of modulation and the second type of modulation are spread spectrum modulations, as recited in claims 11, 19, 27, and 35.

Morrow, Jr. discloses a related radio communication transceiver in Figure 2 comprising a transmission section (14, 16, 22), an antenna switch (18), and a reception section (22, 24, 26, 30) including a narrowband receiver (30). Morrow, Jr. also teaches that a packet transceiver shown in Figure 1 or Figure 2 is capable of operating in tow modes: narrowband and wideband. In the narrowband mode, a sequence generator 22 outputs a non-spreading waveform; i.e., for direct sequence, the "all ones" code is

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produced, and for frequency hopping, a single frequency is selected. When the radio is operating in the wideband mode, the sequence generator produces a long spreading code sequence which is common to all radios in the network. See col. 6, line 66 to col. 7, line 7.

Therefore, it would have been obvious to one of ordinary skill in the art as taught by Morrow, Jr. such that Smith's first type of modulation is a narrowband modulation which is a direct sequence if "all ones" code is produced, and a frequency hopping if a single frequency is selected.

Regarding claims 12-13, 22-23, 28-29, and 38-39, when the first type of modulation is a direct sequence spread spectrum modulation, the second type of modulation is a frequency hopping spread spectrum modulation.

Regarding claims 17-18, 25-26, 33-34, and 41-42, as described in the description of the related art (col. 1, lines 42-45), it is well known to a skilled person in the art to provide a laptop or wireless communication or a desktop computer for wire communication with a communication transceiver or a hand held size as the hand held device 13 to be held in one hand of a user.

8. Claims 16, 24, 32, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Morrow, Jr. as applied to claims 11, 19, 27, and 35 and further in view of Sheffer et al. U.S. Patent No. 5,131,019 (hereinafter "Sheffer").

Regarding claims 16, 24, 32 and 40 as applied to claims 11, 19, 27, and 35 respectively, although Smith and Morrow Jr. do not include a modem transceiver

arranged to provide wired communication wherein the controller 103 is arranged to select at least one of the radio transceiver and the modem transceiver.

Sheffer discloses a related radio communication system in Figure 7 comprising a control interface circuit 60 for selecting one of a digital communicator (wired modem or transceiver) 5 and a cellular radio transceiver 3. See col. 4, lines 48-68.

Therefore, it would have been obvious to one of ordinary skill in the art to include a wired modem or transceiver in Smith's radio communication system, for instance, within the PBX or PABX 14 in order to have both wireless and wire communications controlled by a controller or processor as taught by Sheffer that is capable of communication, for example, by a hand held device used in a remote area or a desktop computer used at office or home.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is 571- 272-3051. The examiner can normally be reached on Monday-Friday 10:00-6:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on 571- 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YOUNG T. TSE/
Primary Examiner, Art Unit 2611